

In the Claims:

1 1. (original) A method for pressing an object with a main
2 piston placed in a main cylinder by means of applying a
3 prescribed pressure to said main piston with working fluid
4 wherein

5 said working fluid is compressed to said prescribed
6 pressure by supplying said working fluid to said main
7 cylinder with driving power of a piezoelectric element.

1 2. (original) The pressing method according to claim 1 wherein
2 a prescribed voltage is applied to said piezoelectric
3 element repeatedly until the pressure of said working fluid
4 reaches to said prescribed pressure.

1 3. (currently amended) ~~A method for pressing an object with a~~
2 ~~main piston by means of working fluid to which a~~ The
3 pressing method according to claim 1 wherein said
4 prescribed pressure is applied through a piping system, the
5 piping system including ~~[[a]]~~ said main cylinder, a supply
6 line and a discharge line of said working fluid with
7 respect to said main cylinder, a check valve preventing
8 reverse flow of said working fluid from said main cylinder
9 to said supply line, and a sub-cylinder provided within
10 said supply line, the pressing method comprising:

11 a first step of displacing a sub-piston provided
12 within said sub-cylinder from an initial position to press
13 said working fluid such that said working fluid is

introduced via said check valve to said main cylinder to displace said main piston provided within said main cylinder; and

a second step of causing said sub-piston to return to said initial position such that said working fluid is supplied to said sub-cylinder,

said first step and said second step being repeated successively until a pressure of said working fluid in said main cylinder reaches ~~[[*]]~~ said prescribed pressure. ~~[[level-]]~~

4. (original) The pressing method according to claim 3 wherein

said first step is performed in a state where a discharge control valve disposed in said discharge line and a supply control valve disposed in said supply line are closed, and

said second step is performed in a state where said discharge control valve and said check valve are closed and said supply control valve is open.

5. (currently amended) The pressing method according to claim 4 wherein

said supply control valve, said discharge control valve and said sub-piston each respectively have a respective said piezoelectric element attached thereto, and

said piezoelectric elements serve to open and close said supply control valve and said discharge control valve,

8 and to displace said sub-piston from the initial position,
9 respectively.

1 6. (currently amended) The pressing method according to
2 claim 3 wherein

3 a detector provided in said main cylinder detects the
4 pressure of said working fluid, and

5 when said detector detects said prescribed pressure,
6 ~~[[level]]~~ the displacement of said sub-piston is
7 terminated.

Claims 7 to 11 (canceled).

1 12. (currently amended) An apparatus for pressing an object,
2 comprising:

3 a main cylinder;

4 a main piston arranged in said main cylinder;

5 a working fluid; and

6 ~~means for applying said working fluid at a prescribed~~
7 ~~pressure to said main piston for pressing the object; and~~

8 means for pressurizing said working fluid to ~~[[said]]~~
9 a prescribed pressure and for applying said working fluid
10 at said prescribed pressure to said main piston for
11 pressing the object, including a piezoelectric element with
12 a driving power for pressurizing and supplying said working
13 fluid.

1 13. (new) Th apparatus according to claim 12 further
2 comprising:

3 a working fluid source that supplies said working
4 fluid;

5 wherein said means comprise:

6 a check valve preventing reverse flow of said working
7 fluid supplied to said main cylinder;

8 a sub-cylinder linked to said main cylinder and having
9 said working fluid reserved therein for supply to said main
10 cylinder;

11 a sub-piston placed within said sub-cylinder;

12 a supply line for supplying said working fluid from
13 said working fluid source to said sub-cylinder;

14 a supply control valve disposed in said supply line;

15 a discharge line for discharging said working fluid
16 from said main cylinder to said working fluid source;

17 a discharge control valve disposed in said discharge
18 line;

19 a first driving mechanism driving said sub-piston;

20 a second driving mechanism driving said supply control
21 valve; and

22 a third driving mechanism driving said discharge
23 control valve.

1 14. (new) The apparatus according to claim 13 wherein said
2 first, second and third driving mechanisms each include a
3 respective said piezoelectric element, and said
4 piezoelectric elements drive said sub-piston, said supply

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5 control valve and said discharge control valve,
6 respectively.

1 15. (new) The apparatus according to claim 13 wherein, of said
2 first, second and third driving mechanisms, at least said
3 first driving mechanism includes a displacement enlarging
4 portion that enlarges displacement of said sub-piston for
5 transmission to said main piston.

1 16. (new) The apparatus according to claim 13 wherein a piping
2 system including said supply line and said discharge line
3 through which said working fluid flows is incorporated into
4 a unitary pressing mechanism further including said check
5 valve, said sub-cylinder, said sub-piston, said supply
6 control valve, said discharge control valve, and said
7 first, second and third driving mechanisms.

1 17. (new) A resin molding device including the apparatus
2 according to claim 13, further comprising:
3 a reservoir in which molten resin is reserved;
4 a plunger that is pressed by said main piston to press
5 said molten resin; and
6 a cavity into which said pressed molten resin is
7 introduced,
8 the molten resin introduced into said cavity being
9 hardened for resin molding.